

**WE CLAIM:**

1. A curl resistant single substrate label sheet for use with conventional printers,  
comprising:

- 5 at least one body portion, having a front surface and a rear surface, made of a substrate;  
at least one label portion, having a front surface and a rear surface, made of the substrate  
and contiguous with the body portion, having at least one heat resistant adhesive applied to at  
least one portion of the rear surface, and having at least one label formed in the label portion; and  
at least one release liner, having a front surface and a rear surface, made of the substrate  
10 having at least one heat resistant release coating on at least one portion of the front surface, and  
releasably bonded to the label portion by the at least one heat resistant adhesive.

2. The curl resistant single substrate label sheet of claim 1, wherein the sheet has a plurality  
of edges including at least a top edge, a bottom edge, a left edge, and a right edge.

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3. The curl resistant single substrate label sheet of claim 2, wherein the at least one label  
extends to at least one of the plurality of edges.

4. The curl resistant single substrate label sheet of claim 2, wherein the at least one label  
20 portion is bounded on three sides by the top edge, the left edge, and the right edge, and  
substantially all of the label portion is formed into the at least one label.

5. The curl resistant single substrate label sheet of claim 2, wherein the at least one label portion is bounded on three sides by the top edge, the left edge, and the right edge, and the at least one heat resistant adhesive and the at least heat resistant release coating extend substantially to at least one of the plurality of edges.

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6. The curl resistant single substrate label sheet of claim 1, further including printed indicia on at least a portion of the at least one body portion front and rear surfaces, at least a portion of the at least one label portion front surface, and at least a portion of the at least one release liner rear surface.

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7. The curl resistant single substrate label sheet of claim 6, further including printed indicia on at least a portion of the at least one label portion rear surface, and at least a portion of the at least one release liner front surface.

15 8. The curl resistant single substrate label sheet of claim 1, further including at least one remoist area.

9. The curl resistant single substrate label sheet of claim 1, further including at least one removable foil area.

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10. The curl resistant single substrate label sheet of claim 1, further including at least one line of perforation.

11. The curl resistant single substrate label sheet of claim 1, wherein the at least one body portion is formed with at least one fold line.

12. The curl resistant single substrate label sheet of claim 1, wherein the at least one body  
5 portion is formed with at least one viewing window.

13. The curl resistant single substrate label sheet of claim 1, further including at least one score across the grain of the substrate.

10 14. The curl resistant single substrate label sheet of claim 2, further including at least one score across the grain of the substrate and extending from the bottom edge into the at least one body portion.

15 15. The curl resistant single substrate label sheet of claim 14, wherein the at least one score includes a first score and a second score where the first score and the second score are substantially orthogonal to the grain of the substrate, extend substantially orthogonally from the bottom edge into the at least one body portion, and substantially disappear from sight upon exposure to the heat of the conventional printer.

20 16. The curl resistant single substrate label sheet of claim 14, wherein a length of the at least one score is less than approximately fifty percent of a length of the left edge.

17. The curl resistant single substrate label sheet of claim 14, wherein a length of the at least one score is less than approximately twenty-five percent of a length of the left edge.

18. A curl resistant single substrate label sheet having a plurality of edges including at least a top edge, a bottom edge, a left edge, and a right edge, for use with conventional printers,  
5 comprising:

at least one body portion, having a front surface and a rear surface, made of a substrate;  
at least one label portion, having a front surface and a rear surface, made of the substrate and contiguous with the body portion, having at least one heat resistant adhesive applied to at  
10 least one portion of the rear surface, and having at least one label formed in the label portion that extends to at least one of the plurality of edges; and

at least one release liner, having a front surface and a rear surface, made of the substrate having at least one heat resistant release coating on at least one portion of the front surface, and releasably bonded to the label portion by the at least one heat resistant adhesive.

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19. The curl resistant single substrate label sheet of claim 18, wherein the at least one label portion is bounded on three sides by the top edge, the left edge, and the right edge, and substantially all of the label portion is formed into the at least one label.

20. The curl resistant single substrate label sheet of claim 18, wherein the at least one label portion is bounded on three sides by the top edge, the left edge, and the right edge, and the at least one heat resistant adhesive and the at least heat resistant release coating extend substantially to at least one of the plurality of edges.

21. The curl resistant single substrate label sheet of claim 18, further including printed indicia on at least a portion of the at least one body portion front and rear surfaces, at least a portion of the at least one label portion front surface, and at least a portion of the at least one release liner rear surface.

22. The curl resistant single substrate label sheet of claim 21, further including printed indicia on at least a portion of the at least one label portion rear surface, and at least a portion of the at least one release liner front surface.

23. The curl resistant single substrate label sheet of claim 18, further including at least one remoist area.

24. The curl resistant single substrate label sheet of claim 18, further including at least one removable foil area.

25. The curl resistant single substrate label sheet of claim 18, further including at least one line of perforation.

26. The curl resistant single substrate label sheet of claim 18, wherein the at least one body portion is formed with at least one fold line.

27. The curl resistant single substrate label sheet of claim 18, wherein the at least one body portion is formed with at least one viewing window.

28. The curl resistant single substrate label sheet of claim 18, further including at least one  
5 score across the grain of the substrate.

29. The curl resistant single substrate label sheet of claim 28, wherein the at least one score extends from the bottom edge into the at least one body portion.

10 30. The curl resistant single substrate label sheet of claim 29, wherein the at least one score includes a first score and a second score where the first score and the second score are substantially orthogonal to the grain of the substrate, extend substantially orthogonally from the bottom edge into the at least one body portion, and substantially disappear from sight upon exposure to the heat of the conventional printer.

15 31. An in-line method for making a plurality of curl resistant single substrate label sheets, comprising:

providing a web of substrate, in a longitudinal direction, of indeterminate length having a front surface and a rear surface and two laterally opposite edges;

20       applying a strip of release coating to at least a portion of the rear surface of the substrate and curing the release coating;

applying a strip of heat resistant adhesive to at least a portion of the rear surface of the substrate, or to the strip of release coating;

folding the web of substrate longitudinally along a fold line thereby releasably joining a plurality of portions of the rear surface;  
trimming the fold line from the web of substrate; and  
cutting the web of substrate into a succession of separate curl resistant single substrate  
5 label sheets.

32. The method of claim 31, further including the step of printing at least one color on a portion of the front surface and the rear surface of the web of substrate prior to applying the strip of release coating.

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33. The method of claim 32, further including the step of scoring the web of substrate, across the grain of the web of substrate, in at least one location prior to the cutting of the web of substrate.

15 34. An in-line method for making a plurality of curl resistant single substrate label sheets, comprising:

providing a web of substrate, in a longitudinal direction, of indeterminate length having a front surface and a rear surface and two laterally opposite edges;

applying a strip of release coating to at least a portion of the rear surface of the substrate  
20 and curing the release coating;

applying a strip of heat resistant adhesive to at least a portion of the rear surface of the substrate, or to the strip of release coating;

slicing the web of substrate longitudinally along a cut line thereby creating a plurality of sections of the web of substrate;

merging the plurality of sections of the web of substrate longitudinally about the cut line thereby releasably joining a plurality of portions of the rear surface; and

5       cutting the web of substrate into a succession of separate curl resistant single substrate label sheets.

35.    The method of claim 34, further including the step of printing at least one color on a portion of the front surface and the rear surface of the web of substrate prior to applying the strip  
10   of release coating.

36.    The method of claim 34, further including the step of scoring the web of substrate, across the grain of the web of substrate, in at least one location prior to the cutting of the web of substrate.

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